Nearer to Zero: Central London

8th July 2014
Nick Rogers
UK Design Director
• 24 high quality 1, 2, 3 & 4 bedroom private apartments and duplexes.

• Code for Sustainable Homes Level 4+ (Westminster requirement beyond London Plan)

• BREEAM ‘Excellent’ for the commercial space.

• Electric car charging points provided

• Provision of high levels of cycle parking

• Scheme designed to Lifetime Homes, and Secured by Design Standards
73 Great Peter Street

- RC frame, PC panes with brick slips and a framed inner leaf give external wall u-value of 0.15w/m²k
- Sedum roof
- CHP provides metered heat to apartments and electricity to common areas and grid.
- Additionally, roof mounted photovoltaic panels help achieve 20% carbon reduction in line with local policies.
- CHP has been designed so that the proposed development at Chadwick St can be connected at a later date and potentially for a further residentially led scheme at Ashley House, 2 Monck Street. Connecting further developments will allow the CHP to operate more efficiently.
“... but there’s nothing particularly special about the scheme...”

TW project manager
Great Peter Street

- Bespoke
- Project specific design team
- Project specific suppliers and subcontractors
- High costs and high values

The majority of our homes

- Standardisation and repetition
- Details: TW specific; could be industry accredited…
- Subcontractors and suppliers
  - Work on spec and details
  - On site training; successful with air tightness
- Constrained values and costs; both viability and affordability an issue
Fabric energy efficiency

- Confident of achieving this for both standard homes and bespoke
- Still have concerns on air quality and condensation with lower air permeability on a larger number of homes
- Confident of industry’s ability to resolve DVaB issues:
  - More accurate prediction from calculation software
  - Standard/accredited details
  - Better contractor training
  - Focussed inspection and testing
  - But there is still the possibility of further complication…
Zero Carbon components

On site compliance

- We can demonstrate that this works on sites like Great Peter St and our Cranbrook development in Devon.
- Still have concerns on viability and practicality on “bread and butter sites”. CHP not suitable, left with PV as only option. Can we mitigate enough carbon?
Allowable solutions???

- Exploring all the options of in-house and partnered solutions and engaging in the debate…
- But won’t it just end up being a tax on development set at a politically acceptable level?
Some thoughts on the housing standards review

Access
Security
Water
Energy
Space

We’re looking for certainty, simplicity and affordability!